

KA Cassidy *et al.* – Supporting Information

WebTable 1. Descriptive information for the five US national parks and preserves (“parks”) included in the analysis

Park/preserve	Size (km ²)	US states or Canadian provinces along park border	Length of border (km)	Length of border per area unit (km/km ²)	Elevation	Primary land-cover types and terrain	Primary gray wolf (<i>Canis lupus</i>) prey	Park yearly visitation (2015–2019 average)	Roads in park (km)
Denali National Park and Preserve	24,464	Alaska	~860 km	0.035 km/km ²	480–6200 m, most wolf use below 2000 m	Eastern region includes high alpine, open river gravel bars, and willow-lined creeks; western region has flat, lowland black spruce (<i>Picea mariana</i>) and long, meandering rivers and wetlands	Caribou (<i>Rangifer tarandus</i>), moose (<i>Alces alces</i>)	597,358	148 km (only 24 km open to public travel)
Grand Teton National Park	1254	Wyoming	~250 km	19.93 km/km ²	2000–4200 m, most wolf use below 2600 m	Rugged and steep mountain peaks and foothills, sagebrush (<i>Artemisia</i> spp) flats	Elk (<i>Cervus canadensis</i>)	3,326,752	245 km paved
Voyageurs National Park	882	Minnesota, Ontario (border often runs along shoreline or through large waterbodies)	~250 km	0.28 km/km ²	330–400 m with little topographic relief	Dense forests (coniferous, deciduous, and mixed) with wetlands, lakes, and bogs	White-tailed deer (<i>Odocoileus virginianus</i>), beaver (<i>Castor canadensis</i>)	238,021	7 km
Yellowstone National Park	8991	Montana, Wyoming, Idaho	~470 km	0.05 km/km ²	1600–3400 m, most wolf use below 2600 m	Open valleys of sagebrush and grass, lodgepole pine (<i>Pinus contorta</i>) and other conifer forests at varying post-wildfire stages	Elk, bison (<i>Bison bison</i>)	4,121,340	499 km paved
Yukon-Charley Rivers National Preserve	10,220	Alaska and Yukon Territory	~720 km	0.07 km/km ²	180–1800 m	Rolling hills and river bluffs, black spruce primary treecover at lower elevation, as well as ponds, sloughs, and tussock tundra	Caribou, moose	1123	0 km